

## CLAIMS:

1. A barrier laminate (1) comprising barrier and planarisation materials, characterized in that said barrier laminate (1) contains at least one discontinuous layer (4) of a planarisation material, which layer is divided into unconnected areas (5) distributed along the plane.  
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2. A barrier laminate (1) according to claim 1, wherein said unconnected areas (5) are separated by regions (6) of a barrier material.
3. A barrier laminate (1) according to claim 1 or 2, wherein said planarisation  
10 material is an organic material.
4. A barrier laminate (1) according to claim 1 or 2, wherein said planarisation material is a combination of organic and inorganic materials.
- 15 5. A barrier laminate (1) according to any one of the preceding claims, wherein said barrier material is an inorganic material.
6. A barrier laminate (1) according to any one of the claims 2-5, wherein said  
20 regions (6) of a barrier material forms a checked pattern.
7. A barrier laminate (1) according to any one of the preceding claims, further comprising at least one continuous layer (3) of a barrier material.
8. A barrier laminate (1) according to any one of the preceding claims, wherein  
25 said discontinuous layer (4) is arranged between two continuous layers (3) of a barrier material.
9. A barrier laminate (1) according to any one of the preceding claims, further comprising at least one continuous layer (2) of a planarisation material.

10. A barrier laminate (1) according to any one of the previous claims, wherein said planarisation material is a polymeric material.
- 5 11. A barrier laminate (1) according to any one of the preceding claims, wherein said planarisation material is selected from the group consisting of parylene, acrylates, epoxides, urethanes, spin-on dielectrics, and siloxanes.
- 10 12. A barrier laminate (1) according to any one of the preceding claims, wherein said barrier material is selected from the group consisting of are  $\text{SiO}_2$ ,  $\text{SiC}$ ,  $\text{Si}_3\text{N}_4$ ,  $\text{TiO}_2$ ,  $\text{HfO}_2$ ,  $\text{Y}_2\text{O}_3$ ,  $\text{Ta}_2\text{O}_5$ , and  $\text{Al}_2\text{O}_3$ .
13. Use of a barrier laminate (1) according to any one of the preceding claims as an oxygen and/or water impermeable film.
- 15 14. A method for the manufacture of a discontinuous layer (4) in a barrier laminate (1) comprising:
- depositing a continuous layer of a planarisation material,
  - removing regions of said layer of a planarisation material, and
  - 20 - filling said regions with a barrier material.
15. A method for the manufacture of a discontinuous layer (4) in a barrier laminate (1) comprising:
- depositing a patterned layer of a planarisation material, whereby regions where
  - 25 no planarisation material is deposited are formed, and
  - filling said regions with a barrier material.
16. A method according to claim 15 or 16, wherein said filling of said regions with a barrier material is performed simultaneously as the deposition of a continuous layer of a barrier material on said discontinuous layer.
- 30 17. An electronic device, or more particular electroluminescent device, having active layers and a barrier laminate (1) according to any one of the claims 1 to 12 positioned over the active layers, the laminate having a discontinuous layer (4) which is, among the

layers of the laminate containing planarisation material, the one closest to the active layers of said electroluminescent device.